IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Appl.No.:	09/896,503	Confirmation No.: 9240
Appellant:	Ronk et al	
Filed:	June 29, 2001	
TC/AU:	2625	
Examiner:	Patel	
Docket:	TI-30890	
Cust.No.:	23494	

SUBSTITUTE APPEAL BRIEF

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

In response to the Notification of Non-Compliant Appeal Brief mailed 08/29/2006, appellant hereby submits the attached sheets which contain the Rule 41.37 items of appellant's substitute Appeal Brief. The fee for filing a brief in support of the appeal has previously been paid. The Director is hereby authorized to charge any other necessary fees to the deposit account of Texas Instruments Incorporated, account No. 20-0668.

Respectfully submitted,

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Rule 41.37(c)(1)(i) Real party of interest

Texas Instruments Incorporated owns the application.

Rule 41.37(c)(1)(ii) Related appeals and interferences

There are no related dispositive appeals or interferences.

Rule 41.37(c)(1)(iii) Status of claims

Pursuant to MPEP 1205.02, for each claim in the case appellant states the status as follows:

Claim 1: rejected

Claim 2: rejected

Claim 3: rejected

Claim 4: rejected

Claim 5: allowed

Claim 6: allowed

Claim 7: allowed

Pursuant to MPEP 1205.02, appellant identifies each claim on appeal as follows

Claim 1: on appeal

Claim 2: on appeal

Claim 3: on appeal

Claim 4: on appeal

Rule 41.37(c)(1)(iv) Status of amendments

There is no amendment after final rejection.

Rule 41.37(c)(1)(v) Summary of claimed subject matter

The independent claims on appeal consist of method claim 1.

The subject matter of claim 1 is a method of video object feature data generation by extracting a set of features (e.g., color, size, etc.) from a moving object detected in a sequence of images (application page 19, lines 3-7 and lines 13-14), extracting a sequence of grid blocks corresponding to motion of the

object in the sequence of images (application page 19, lines 8-11), and then storing the set of features and sequence of grid blocks (application page 19, lines 11-12 and 13-15).

As background, the method would be used to generate data about objects traversing the field of view of an image sensor such as a surveillance camera; the data can be used in querying an image database containing the image sensor output to find objects. Application Fig.6 shows the grid blocks for an image and Fig.8 is a flowchart.

Rule 41.37(c)(1)(vi) Grounds of rejection to be reviewed on appeal

The grounds of rejection to be reviewed on appeal are:

Claims 1-4 were rejected under 35 USC § 102(b) as being anticipated by Tsuchikawa et al. (US 5,748,775).

Rule 41.37(c)(1)(vii) Arguments

Claims 1-4 were rejected as anticipated by Tsuchikawa

Claims 1-4 Tsuchikawa extracts (detects) a moving object in a sequence of images by updating the background and then subtracting it from the images to find the object; in contrast, claim 1 presumes an already-detected moving object in a sequence of images and is directed at storing features plus the path of motion for the for the object. In particular, Tsuchikawa is based on sub-regions of images and tracks the intensity for each sub-region over time (e.g., Fig.4 upper right with sub-regions a1 a2, a3, ... for time interval t_0). Next, for each sub-region the variance of these intensity measurements over recent time is used to decide if the sub-region is part of the current background or if it currently contains some part of a moving object (e.g., Fig.4 middle right with 221 decision for sub-region a1, 222 decision for sub-region a2 , ...). Then the background is reconstructed from the corresponding background sub-regions and is subtracted to give the images modified to contain only the moving objects (e.g., Fig.4 left side). That is, Tsuchikawa generates a sequence of images with the background removed as illustrated by 520 in the lower left portion of Fig.4. However,

Tsuchikawa does not suggest the storing of a feature set plus a motion path (not a sequence of images) for a detected object as required by claim 1.

Rule 41.37(c)(1)(viii) Claims appendix

1. A method of video object feature data generation, comprising:

(a) extracting a first set of features from a moving object detected in a sequence of images;

(b) extracting a sequence of grid blocks corresponding to motion of said object in said sequence of images; and

(c) storing said first set of features and said sequence of grid blocks.

2. The method of claim 1, wherein:

(a) said extracting of step (a) of claim 1 includes extracting features in every image in said sequence containing said object.

3. The method of claim 1, further comprising:

(a) for each of said grid blocks of step (b) of claim 1, extracting features and associating said grid-block extracted features with said grid block sequence.

4. The method of claim 1, wherein:

(a) said first set of extracted features of step (a) of claim 1 includes a color histogram.

Rule 41.37(c)(1)(ix) Evidence appendix

none

Rule 41.37(c)(1)(x) Related proceedings appendix

none